OPERATION AND PARTS MANUAL

Powerwinch®

BOAT TRAILER WINCH

MODEL 915

READ CAREFULLY BEFORE ATTEMPTING TO ASSEMBLE, INSTALL, OPERATE OR MAINTAIN THE PRODUCT DESCRIBED. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE. RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.

Description

Trailer winches are used for launching and loading boats. This winch features power-in and power-out capabilities with a hand-held remote control device.

Unpacking

When unpacking this product, carefully inspect for any damage that may have occurred during transit.

General Safety Information

The following safety precautions must be followed at all times:

1. Read all manuals included with this product carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Only persons well acquainted with these rules of safe operation should be allowed to use the winch.

⚠WARNING **ALWAYS UNPLUG THE WIRING HARNESS TO PREVENT ACCIDENTAL STARTING BEFORE ATTEMPTING TO INSTALL, SERVICE, RELOCATE OR PERFORM ANY MAINTENANCE.**

2. Never use the winch to lift or move people or animals.

3. Stand away from the winch when in use and keep children free from winch area at all times.

⚠WARNING **ALWAYS STAND CLEAR OF THE AREA BETWEEN THE LOAD OR ANCHOR POINT AND THE WINCH. SERIOUS INJURY COULD OCCUR, IF THE CABLE BREAKS.**

4. Always keep hands clear of cable spool (drum area).

5. Do not wear loose fitting clothing, scarves, or neck ties. Loose clothing may become caught in moving parts and result in serious personal injury.

6. **Never** use the winch for overhead lifting.

7. Always wire the winch with circuit breakers. Failure to use the breakers could cause overheating thus creating a potential fire hazard or motor damage.

General Safety (Continued)

⚠ DANGER ***THE CABLE FASTENERS ON THIS OR ANY WINCH ARE NOT DESIGNED TO HOLD RATED LOADS. ALWAYS LEAVE A MINIMUM OF FIVE WRAPS OF CABLE ON THE DRUM AT THE BOTTOM LAYER TO ACHIEVE A RATED LOAD.***

8. Inspect the entire cable for weak or worn condition or kinking (short tight twist or curl) before each use.
9. When replacing the cable, **always** use a Powerwinch cable with the same winch rating and cable strength.
10. Never substitute rope for cable. Possible injury could occur.
11. Do not attempt to pull a load greater than the rated load of the winch.
12. Do not use the winch to hold or support the load once a job is complete or to permanently secure the load. Damage could occur to the winch or the load..
13. Never wrap the winch cable around the load. Use an Ecostrap™ or chain to prevent the cable from kinking or fraying.
14. Always wear leather gloves when handling the cable. Steel cable can cause hand injuries.

⚠ CAUTION **After using the winch, always disconnect the power cord from the socket to avoid moisture collection in the socket and prevent the possibility of short circuiting.**

15. Always block the vehicle wheels to help prevent the vehicle from rolling when pulling a load with the winch.

16. Do not operate the winch under the influence of drugs, alcohol, or other medication.

Specifications

Various load conditions will affect the winch performance. The line pull required for a specific application depends on the weight of the load, condition of the trailer rollers, and the degree of the loading ramp incline. The chart on the following page is based on a single line pull and is a guideline to aid in calculating pulling requirements.

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Chart 1 Approximate Rolling Load Capacities

% incline (° incline)	Level Surface 0°	5% 3°	10% 6°	20% 11°	30% 17°	50% 26°	70% 35°	100% 45°
Boat Wt. (in lbs.)	32,000	20,010	15,060	10,200	7,830	5,580	4,590	3,870

- A 10% incline (or 6°) is 1 ft rise in 10 feet.
- To convert pounds to kilos divide by 2.2.
- Capacity can be increased (almost doubled) by using a pulley block.

Chart 2 Winch and Boat Capacities

Model	Single Line Pull	Double Line Pull	Approximate* Boat Weight	Approximate* Boat Size
915	3,200 lbs	5,900 lbs	9,500 lbs	22-29 ft

* Boat size and weight are approximate and varies depending on boat type. When calculating the boat weight, be sure to use fully loaded weight including boat, motor, fuel ,etc.

Chart 3 Winch Specifications

Model	Line Speed @ Capacity (FPM)	Gear Ratio	Voltage (volts)	Circuit Breaker (amps)	Unit Weight (lbs)	Depth	Height	Width
915	10	450:1	12	60	40	10”	10”	8”

Installation

MOUNTING

The winch can be mounted on the trailer in the same position and location as a present winch. After removing the hand winch, bolt the Powerwinch unit using a minimum of (2) 3/8" Grade 5 machine bolts and lock nuts. The Powerwinch Quick Mount Kit (P7700000AJ) is available from the dealer.

The cable hook on the winch and the bow eye on the boat should be at the same height when the boat is in the fully loaded position on the trailer. If the bow eye is too high, extra pull is required of the winch and extra stress is exerted on the boat's stern and bow eye.

To achieve equal height of the winch and boat, raise or lower the winch stand. In most cases, the trailer manufacturer will have an adapter available for use with a inch.

⚠ CAUTION **A minimum of 12 inch clearance is required between the winch and the bow eye to prevent the cable hook from being drawn into the winch drum when the boat is in the fully loaded position on the trailer.**

If necessary, extend the bow stop to obtain the clearance.

When using a double line pull (using a pulley block), install an appropriate eye bolt on the winch stand as close as possible to the base of the winch. If a Quick Mount Kit is used, make sure the winch is in the forward position before installing the eye bolt.

PERMANENT WIRING

To permanently wire the winch, refer to Figure 1 follow the outlined procedures.

Rear Mounted Winch

1. Attach the circuit breaker to the **positive (+)** battery post or to the **positive (+)** battery side of the starter solenoid (See Figure 1).

⚠ CAUTION **Never attach the circuit breaker to the battery ground terminal.**

2. Run the wire under the vehicle to the battery, attaching at suitable intervals to the vehicle frame. Use nylon wire ties (not supplied) to secure the wire to the vehicle frame about every 18 inches. If no wire ties are available use electrician's tape. Avoid sharp edges or places where the wire might rub.

3. Attach the ground wire (black) to the vehicle frame using a 5/16" bolt and lock nut. Before attaching the wire, clean the metal with a wire brush, steel wool, or sandpaper.

4. Remove the knock out plug in the spare tire well and draw the excess wire up into the vehicle.

Front Mounted Winch

1. Attach the circuit breaker to the **positive (+)** battery post or to the **positive (+)** battery side of the starter solenoid (See Figure 1).

2. Cut the harness at the circuit breaker end to the required length.

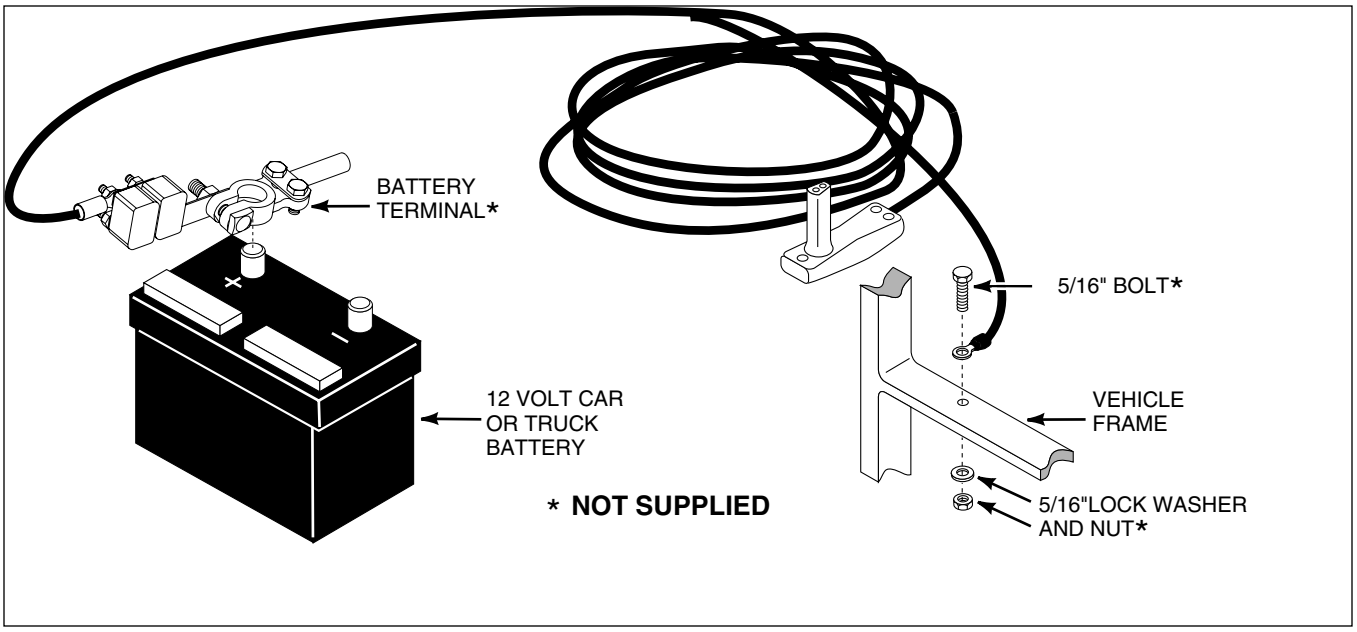

Figure 1 Permanent Wiring Hookup

Installation (continued)

3. Run the wire under the vehicle to the battery, attaching at suitable intervals to the vehicle frame. Use nylon wire ties (not supplied) to secure the wire to the vehicle frame about every 18 inches. If no wire ties are available use electrician's tape. Avoid sharp edges, hot or moving engine parts (manifold, radiator, hoses etc.) or places where the wire might rub.

3. Attach the ground wire (black) to the vehicle frame using a 5/16" bolt and lock nut. Before attaching the wire, clean the metal with a wire brush, steel wool, or sandpaper.

TEMPORARY WIRING

To temporary wire the winch, follow the outlined procedures. A complete wiring harness is available from the dealer (Part Number P7866000AJ).

1. Attach two large "alligator" type clips, one to the circuit breaker and one to the end of the black wire.

2. Run the red wire (with the circuit breaker) to the battery and clip the wire to the hot (positive) side of the battery.

3. Clip the black wire to the vehicle frame or negative side of the battery.

Operation

UNLOADING
To unload the boat, refer to Figure 2 and follow the outlined procedures.

1. Attach the winch cable hook to the bow eye on the boat (See Figure 2).

Operation (continued)

⚠WARNING

CLEAR THE AREA AROUND AND BEHIND THE BOAT OF PEOPLE, ANIMALS, AND OBSTRUCTING OBJECTS BEFORE LOADING OR UNLOADING. POSSIBLE INJURY COULD OCCUR.

2. Remove the boat tie downs.

⚠WARNING

ALWAYS STAND CLEAR OF THE AREA BETWEEN THE LOAD OR ANCHOR POINT AND THE WINCH. SERIOUS INJURY COULD OCCUR, IF THE CABLE BREAKS.

3. Step clear of the winch and winch cable area. Use the remote control switch and power-out the cable until the boat is completely unloaded.

4. Remove the winch cable hook from the bow eye and power-in the cable.

LOADING
To load the boat, follow the outlined procedures.

1. Align the boat and trailer.

2. Power-out the winch cable and attach the winch cable hook to the bow eye on the boat.

⚠WARNING **ALWAY STAND CLEAR OF THE AREA BETWEEN THE LOAD**

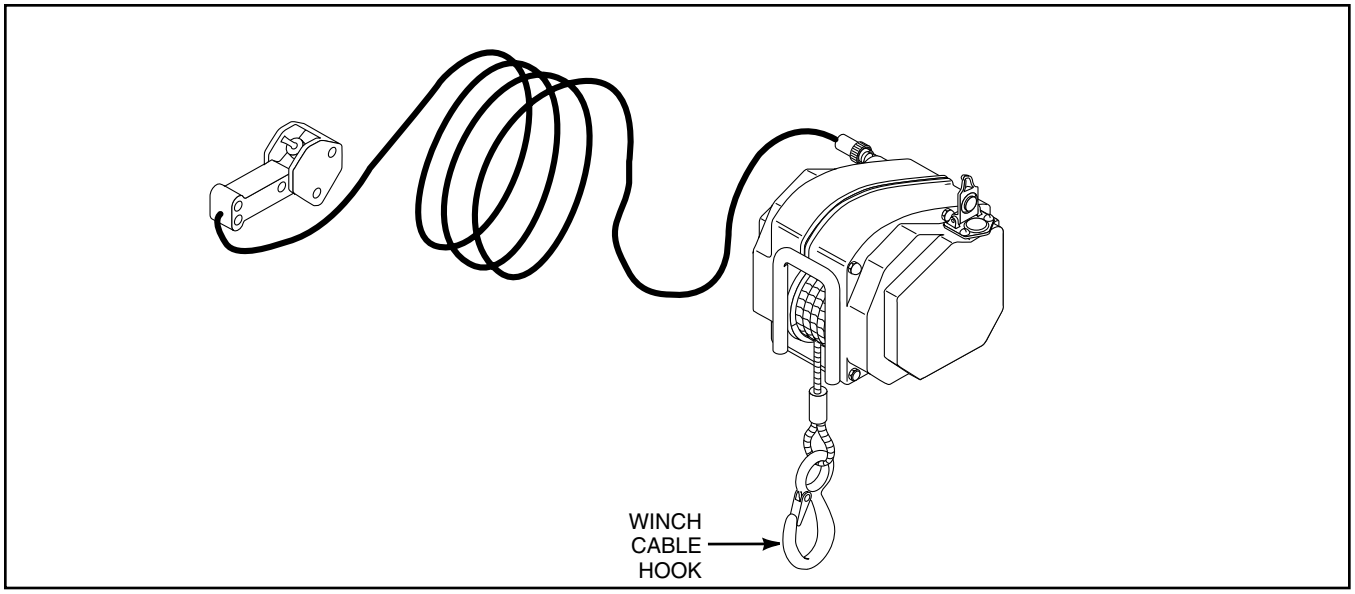

Figure 2 Operation Components

Operation (continued)

OR ANCHOR POINT AND THE WINCH. SERIOUS INJURY COULD OCCUR, IF THE CABLE BREAKS.

3. Step clear of the winch and winch cable area. Use the remote control switch and power-in the cable until the boat hits the bow stop.

4. When the boat is fully loaded, secure the boat to the trailer with tie-downs. It is not recommeded to use the winch to hold the load because damage could occur to the winch.

5. Remove the winch cable hook from the bow eye and power-in the cable.

Maintenance

LUBRICATION

Once a year, the cable should be lubricated with Whitmore's Wire Rope Spray, WD40 or a similar product. Spray the drum and the cable as the cable is being wound. Remove the cover and lubricate the gears once a year with a lithium base grease. Be careful not to get grease on the clutch lining.

Maintenance (continued)

CABLE REPLACEMENT

To replace the cable, follow the outlined procedures. Use an exact replacement Powerwinch cable. The winch rating and cable strength are carefully matched. **Never** replace the cable with rope.

⚠WARNING

ALWAYS UNPLUG THE WIRING HARNESS TO PREVENT ACCIDENTAL STARTING BEFORE ATTEMPTING TO INSTALL, SERVICE, RELOCATE OR PERFORM ANY MAINTENANCE.

1. Power-out the cable using the remote control device and unplug the wiring harness.

2. Remove the two cover rods and the four cover screws

3. Cut the old cable approximately 2" from the drum and push the remaining cable and fastener through the drum to remove (See Figure 3).

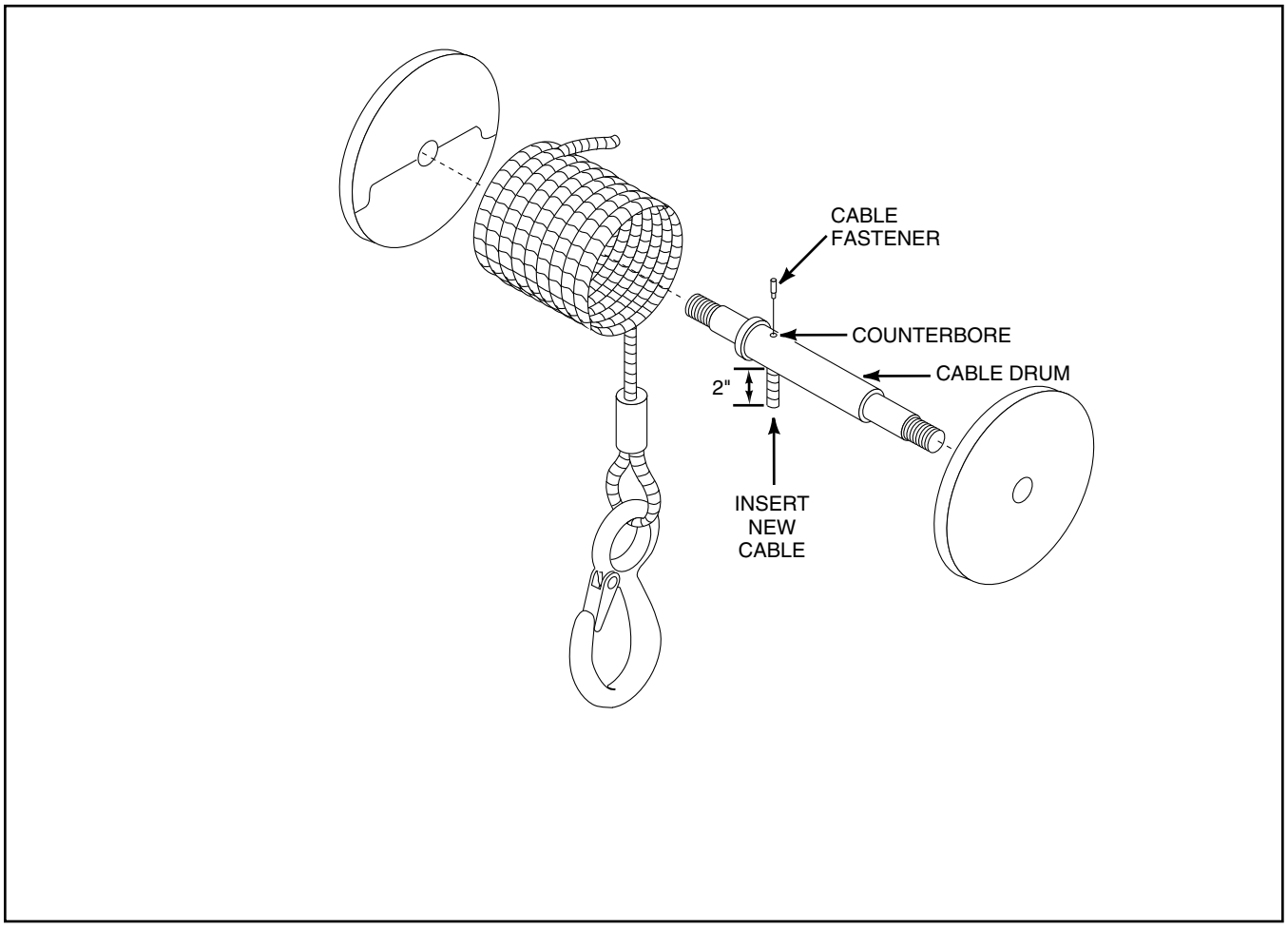

Figure 3 Cable Replacement

Maintenance (continued)

4. Insert the new cable into the drum shaft hole at the end opposite the counterbored end. Draw the cable through the hole and out the counterbored side of the shaft.
5. Push the cable through the fastener until the cable is flush with the end of the fastener.
6. Crimp the fastener onto the cable and pull the cable through the drum shaft until the fastener seats inside the counterbore.
7. Install the cover, two cover rods and the four cover screws and connect the wiring harness.
8. Power-in the cable with a light load to help wind the cable straight into the drum.

LEVELWIND PLATE

When powering-in the cable, the motor will continue to run for a few seconds after releasing the toggle switch on the remote control device, especially without a load. Be sure to allow for this. Do not let the cable hook go into the winch and bend the level wind plate. When winding the cable onto the drum with no load, keep the cable taut (tight) going into the drum.

BRAKE ADJUSTMENT

The winch is equipped with a friction brake which holds the load when the power is off. If the load creeps while the power is off or if the brake slips while powering the load in or out, the brake needs adjustment.

To adjust the brake, follow the outlined procedures and refer to Figure 4.

⚠ CAUTION Do not adjust the brake with a load attached to the winch. The load could release and cause load damage or personal injury.

1. Make sure a load is not attached to the winch. Locate the jam nuts on the rear shaft on the left side of the winch while facing the cable opening.
2. Loosen the outer jam nut and tighten the inner nut. Turn the inner nut clockwise to increase the load capacity or turn counterclockwise to decrease the load capacity. The inner nut should be tight enough to keep the load from slipping or creeping.

⚠ CAUTION Do not overtighten the inner nut. Overtightening the inner nut shortens the motor life.

3. Tighten the outer nut against the inner nut to secure

STORAGE

The winch cable must be lubricated before storing. Lubricate the cable with Whitmore's Wire Rope Spray, WD40 or a similar product. Spray the drum and the cable as the cable is being wound.

Technical Service and Replacement Parts Information

For information regarding the operation or repair of this product, please call AU: 1800-059-899 or NZ: 0800-876-526 and have the following information available:

- Model number
- Serial number
- Part number and description

Address correspondence to:

Trail Com AU Limited
P O Box 7061
Dandenong, Melbourne
Victoria 3175

or

Trail Com Limited
P O Box 98-961
SAMC, Auckland
New Zealand

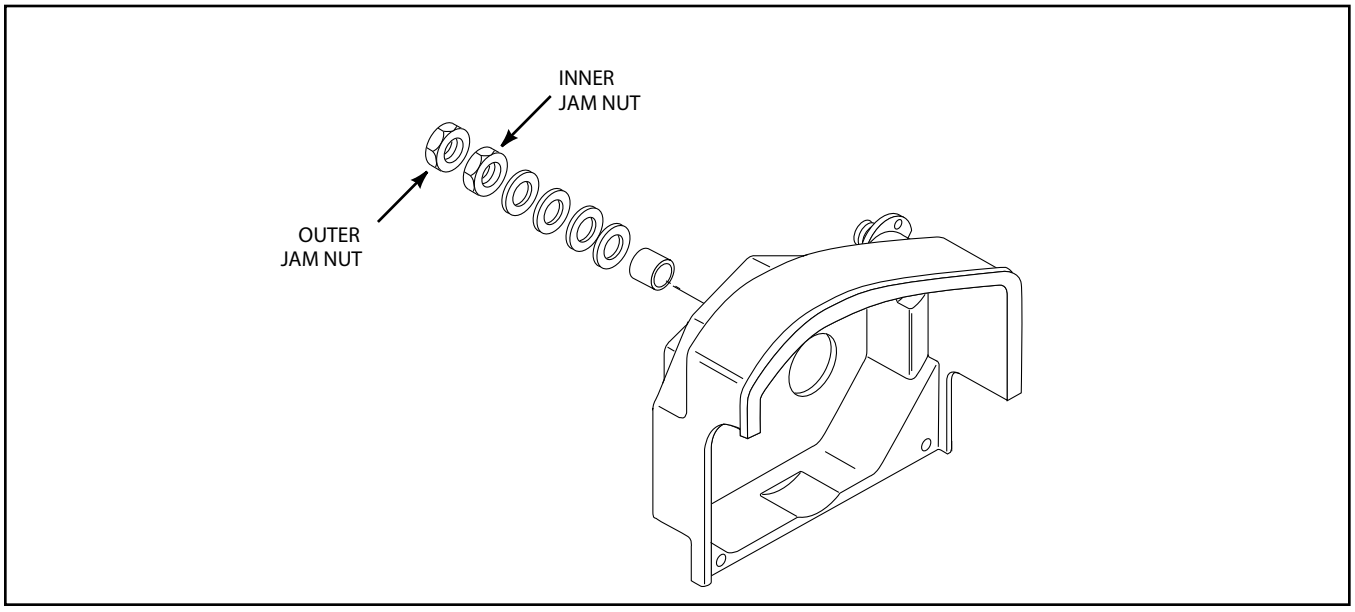

Figure 4 Brake Adjustment

General Troubleshooting Guide

SYMPTOM	POSSIBLE CAUSE (S)	CORRECTIVE ACTION
Winch will not operate.	1. Disconnected or bad wiring or bad circuit breakers.	1. Start checking the wiring at the battery. Bypass the circuit breakers and test the winch. If the winch operates, replace the circuit breakers. 2. Check the wiring insulation for worn or bare spots that may be causing a short. 3. Check all connections for tightness.
	2. Bad plug.	1. Check the male connection at the end of the wiring kit by using probe light across the two prongs inside the plug. If the light illuminates, the wiring is correct. 2. Remove the two cover connecting screws and rods (See Figure 3) from the cover containing the female socket. Plug the male socket into the female socket. Use a probe light across the two connections on the underside of the female socket. Replace the appropriate socket if the light does not illuminate. If the light illuminates, check the switch and/or motor.
	3. Bad switch or motor.	1. Test the switch by using a jumper wire to bypass the switch. Keep fingers away from the winch mechanism. If power gets to the motor, replace the switch. If no power gets to the motor, replace the motor.
Clutch does not hold.	1. Jam nuts too loose.	1. Adjust the brake (See brake adjustment section in this manual).
	2. Worn gears or clutch lining	2. Replace gears or clutch lining.

Limited Warranty

A. This Limited Warranty is given by the Powerwinch Division of the Scott Fetzer Company (the "Company") to the original purchaser (the "Purchaser") of a Powerwinch Product (the "Product") specified in this manual. This Limited Warranty is not transferable to any other party.

B. Responsibilities of the Company under this Limited Warranty:

1. Repair or replace (at the discretion of the Company) any part or parts of the Product found by the Company to be defective within a two (2) year period from the date of purchase.
2. The Company will pay the transportation charge for shipment back to the Purchaser of any Product received for legitimate Warranty repair.

C. Responsibilities of the Purchaser under this Limited Warranty:

1. Complete (fully and accurately) and return to the Company, the Warranty card included in the box. Otherwise, Purchaser will have to show dated proof of purchase to qualify for service under the provisions of the Limited Warranty.
2. Promptly notify the Seller or the Company of any claim hereunder.
3. At the Option of the Company, return the Product to the Company for inspection. Authorization must be given prior to any Product return. Call the Company at AU: 1800-059-899 / NZ: 0800 876-526 or write the Company, for authorization and complete instructions on how to return the Product directly to the Company.

Trail Com AU Limited Unit 5, 25-27 South Link Dandenong, Melbourne Victoria 3175	or	Trail Com Limited 15 Oak Road, Manukau, Auckland New Zealand

4. Use reasonable care in maintenance, operation, use and storage of the Product in accordance with the instructions contained in the Owner's Manual.
5. Have Warranty work performed by a dealer or representative approved by the Company.
6. Except as noted in B.2., transportation charges are the responsibility of the Purchaser.

D. This Limited Warranty covers:

1. Defects in workmanship or materials.
2. Any part or parts of the Product sold or manufactured by the Company.

E. This Limited Warranty does not cover:

1. Any failure that results from improper installation of the Product.
2. Any failure that results from accident, Purchaser's abuse, neglect, modification, improper maintenance, or failure to operate and use the Product in accordance with the instructions provided in the Owner's Manual supplied with the Product.

F. THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO TWO (2) YEARS FROM DATE OF PURCHASE. THIS IS THE EXCLUSIVE REMEDY AND ANY LIABILITY FOR ANY AND ALL INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES WHATSOEVER IS EXCLUDED.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow exclusion or limitation of incidental or consequential damages, the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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